

Serial No.: 09/746,113
Attorney Docket No.: 3375

REMARKS

Applicants have canceled Claims 21-23 without prejudice. Applicants reserve the right to pursue the canceled Claims in a related application. Applicants have amended Claim 24 to change its dependency.

Applicants have also amended Claims 1, 26, 28 and 29 to more clearly point out the claimed invention and to correct typographical errors. Support for the amendment to Claim 1 may be found, for example, on pages 3, 17-19 and Figure 1 of the Specification.

Applicants submit that no new matter is presented by the amendments and respectfully request entry of the same. Applicants do not acquiesce to the propriety of any of the Examiner's rejections nor disclaim any subject matter to which they are entitled by these amendments.

Objections to the Claims are Obviated

Applicants have amended Claims 26, 28 and 29 to remove the repetitive recitation of "claim 11."

Claim Rejections under 35 U.S.C. § 112 should be Withdrawn

Claims 22-25 are rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite. The Examiner alleges that it would be unclear as to how the steps which involve ddNTP would result in multiple base extension. Applicants respectfully disagree with the Examiner, but solely to expedite the issuance of the present Claims, have canceled Claims 21-23. The dependency of Claim 24 has been changed accordingly.

Serial No.: 09/746,113
Attorney Docket No.: 3375

Applicants respectfully submit that in view of the above amendments, the rejection of Claims 22-25 under 35 U.S.C. §112, second paragraph, should be withdrawn.

Claim Rejections under 35 U.S.C. § 102 should be withdrawn

Claims 1-5 and 31 are rejected under 35 U.S.C. §102 (a) as allegedly being anticipated by Weidenhammer et al. (US Patent No. 6,379,897). Applicants respectfully disagree with the Office Action. However, solely to expedite issuance of the present Claims, Applicants have amended Claim 1 to recite "wherein the primer extension products comprise 5' regions of the mRNAs" and "wherein substantially the entire mRNA transcript sequences are detected" etc. Support for the amendment to Claim 1 may be found, for example, on page 3 (under the section heading "Summary of the Invention"), pages 17-19 (under the section heading "Gene Expression Monitoring by Primer Extension") and Figure 1 of the Specification. Claims 1-5 and 31, after the amendment, are directed to hybridizing mRNAs to a microarray and performing primer extension using the mRNAs as templates for detection. In contrast, Weidenhammer et al. discuss synthesizing cRNA and hybridizing cRNA on an array (Figure 1, Weidenhammer et al.). The method discussed by Weidenhammer et al. is inherently 3' biased because of limited polymerase processivity. The claimed method is capable of detecting the entire transcript sequences. Therefore, Weidenhammer et al. do not disclose each and every element of the currently-claimed invention.

Applicants respectfully submit that in view of the above amendments and remarks, the rejection of Claims 1-5 and 31 under 35 U.S.C. §102 (a) should be withdrawn.

Serial No.: 09/746,113
Attorney Docket No.: 3375

Claim Rejections under 35 U.S.C. § 103 should be withdrawn

Claims 6-20 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Weidenhammer et al. (US Patent No. 6,379,897) in view of Heller et al. (U.S. Patent No. 5,605,662).

The Examiner has also rejected Claims 21-25 and 30 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Weidenhammer et al. in view of Heller et al. and further in view of Caskey et al. (U.S. Patent No. 6,153,379). Applicants have canceled Claims 21-23 without prejudice.

Claims 26-29 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Weidenhammer et al. in view of Heller et al. and further in view of Chee et al. (U.S. Patent No. 5,837,832).

Applicants respectfully disagree with the Office Action and submit that the primary reference Weidenhammer et al. does not teach, suggest or motivate hybridizing mRNAs for extension. Rather, it extensively discusses how mRNAs are reverse-transcribed to make cDNA and how the cDNA is used to make cRNA for hybridization (Figure 1, Weidenhammer et al.). The other references are cited as providing additional features and did not remedy the deficiency in the primary reference. Applicants respectfully submit that the Office Action therefore failed to establish a prima facie case for obviousness and request that the rejection of Claims 6-20, 21-25, 26-29 and 30 under 35 U.S.C. § 103(a) should be withdrawn.

Serial No.: 09/746,113
Attorney Docket No.: 3375

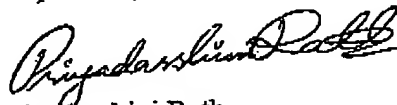
CONCLUSION

For these reasons, Applicants believe all pending claims are now in condition for allowance and should be passed to issue. If the Examiner feels that a telephone conference would in any way expedite the prosecution of the application, please do not hesitate to call the undersigned at (408) 731-5000.

The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account 01-0431.

If the Examiner has any questions pertaining to this application, the Examiner is requested to contact the undersigned agent.

Respectfully submitted,



Priyadarshini Rath
Limited Recognition under 37 CFR 10.9(b)

Dated: March 10, 2004

Customer No. 22886
Legal Department
Affymetrix, Inc.
3380 Central Expressway
Santa Clara, CA 95051
Tel: 408/731-5000
Fax: 408/731-5392